

REMARKS

1. Formal Matters

a. Status of the Claims

Claim 21 is pending in this application. Claim 21 is amended and Claims 22-40 are new. Upon entry of these amendments, claims 21-40 are pending and under active consideration. Applicants respectfully request entry of the amendments and remarks made herein into the file history of the present application.

b. Amendments to the Claims

Claim 21 is amended to recite SEQ ID NO: 46759, which represents VGR3152, in compliance with 37 C.F.R. § 1.821-1.825, support for which amendment can be found at paragraph 42972, which recites:

VGR3152 folded precursor RNA, herein designated VGR FOLDED PRECURSOR RNA, is naturally processed by cellular enzymatic activity into at least 7 separate VGAM precursor RNAs, VGAM1930 precursor RNA, VGAM1931 precursor RNA, VGAM1932 precursor RNA, VGAM1933 precursor RNA, VGAM1934 precursor RNA, VGAM1935 precursor RNA and VGAM1936 precursor RNA, herein schematically represented by VGAM1 PRECURSOR, VGAM2 PRECURSOR, VGAM3 PRECURSOR, VGAM4 PRECURSOR, VGAM5 PRECURSOR, VGAM6 PRECURSOR and VGAM7 PRECURSOR respectively, each of which VGAM precursor RNAs being a hairpin shaped RNA segment, corresponding to VGAM PRECURSOR RNA of Fig.8.

SEQ ID NOS: 1916 and 1917 represent the sequences of VGAM1930 and VGAM1931, respectively, both of which sequences are contained in the application as originally filed. VGAM1930 (SEQ ID NO: 1916) is located in the Human herpesvirus 4 genome at positions 138,657 to 138,715. VGAM1931 (SEQ ID NO: 1917) is located in the Human herpesvirus 4 genome at positions 139,340 to 139,418. SEQ ID NO: 46759 (VGR3152) represents the sequence of the Human herpesvirus 4 genome at positions 138,657 to 139,418. Therefore, SEQ ID NO: 46759 (VGR3152) represents the sequences of VGAM1930 (SEQ ID NO: 1916), VGAM1931 (SEQ ID NO: 1917), and the intervening 624 base pairs in the Human herpesvirus 4 genome between VGAM1930 and VGAM1931 (positions 138,716 to 139,339).

New claim 22 recites the nucleic acid of claim 21, wherein the at least 18 nucleotides is of a sequence selected from the group consisting of SEQ ID NOS: 1916 and 1917, support for which can be found at Table 1, lines 13408-13412 and 13415-13419, and paragraphs 26978 and 26992 of the application as originally filed.

New claim 23 recites a nucleic acid of claim 21, wherein the at least 18 nucleotides is of a sequence selected from the group consisting of SEQ ID NOS: 4641 and 4642, support for which can be found at table 1, lines 13408-13412 and 13415-13419, and paragraphs 26983 and 26994 of the application as originally filed.

New claim 24 recites a nucleic acid of claim 21, wherein the nucleic acid consists of 18 to 24 nucleotides, support for which can be found at claim 1 as originally filed.

New claim 25 recites the nucleic acid of claim 21, wherein the sequence of the nucleic acid consists of (a) SEQ ID NO: 46759; (b) an RNA equivalent of (a); (c) a sequence at least 34/58 identical to (a) or (b); or (d) the complement of any one of (a)-(c), support for which may be found throughout the application including at claim 21 as previously presented.

New claim 26 recites a nucleic acid of claim 25, wherein the at least 18 nucleotides is of a sequence selected from the group consisting of SEQ ID NOS: 1916 and 1917, support for which can be found a new claim 22.

New claim 27 recites a nucleic acid of claim 25, wherein the at least 18 nucleotides is of a sequence selected from the group consisting of SEQ ID NOS: 4641 and 4642, support for which can be found at new claim 23.

New claim 28 recites a nucleic acid of claim 25, wherein the nucleic acid consists of 18 to 24 nucleotides, support for which can be found at new claim 24.

New claim 29 recites a nucleic acid of claim 22, wherein the nucleic acid is an RNA, support for which can be found at claim 1 and paragraphs 26982 and 26993 of the application as originally filed.

New claim 30 recites a nucleic acid of claim 26, wherein the nucleic acid is an RNA, support for which can be found at claim 1 and paragraphs 26982 and 26993 of the application as originally filed.

New claim 31 recites a nucleic acid of claim 29, wherein the nucleic acid is capable of modulating expression of a target gene, support for which can be found at claim 3 as originally filed.

New claim 32 recites a nucleic acid of claim 30, wherein the nucleic acid is capable of modulating expression of a target gene, support for which can be found at claim 3 as originally filed.

New claim 33 recites a nucleic acid of claim 31, wherein the nucleic acid is at least 15/24 complementary to a binding site sequence of 18 to 24 nucleotides of a target gene and wherein the binding site sequence is located in an untranslated region of RNA encoded by the target gene, support for which can be found at Table 2 lines 132628-132682, which shows that among all listed target binding sites of the nucleotide represented by SEQ ID NO: 4642, the sequence of which is included in the sequence of SEQ ID NO: 1917, at the lowest level of complementarity a target binding site of 24 nucleotides has 15 nucleotides complementary to the sequence of SEQ ID NO: 4642; and (b) that the binding site sequence is located in an untranslated region of RNA encoded by the target gene, support for which can be found at paragraphs 21 and 26996 of the specification as originally filed.

New claim 34 recites a nucleic acid of claim 32, wherein the nucleic acid is at least 15/24 complementary to a binding site sequence of 18 to 24 nucleotides of a target gene and wherein the binding site sequence is located in an untranslated region of RNA encoded by the target gene, support for which can be found at new claim 33.

New claim 35 recites a vector comprising an insert, wherein an insert consists of the nucleic acid of claim 21, support for which can be found at paragraph 23 of the application as filed.

New claim 36 recites a vector comprising an insert, wherein an insert consists of the nucleic acid of claim 25, support for which can be found at paragraph 23 of the application as filed.

New claim 37 recites a probe comprising an insert, wherein an insert consists of the nucleic acid of claim 21, support for which can be found at paragraph 27 of the application as filed.

New claim 38 recites a probe comprising an insert, wherein an insert consists of the nucleic acid of claim 25, support for which can be found at paragraph 27 of the application as filed.

New claim 39 recites a gene expression inhibition system comprising the vector of claim 35 and a means for inserting said vector into a cell, support for which can be found at paragraphs 24-26 as originally filed.

New claim 39 recites a gene expression inhibition system comprising the vector of claim 36 and a means for inserting said vector into a cell, support for which can be found at paragraphs 24-26 as originally filed.

c. Amendments to the Specification

Paragraph 0146 is amended to assign SEQ ID NO: 46756 to the sequence shown in Fig. 12A in compliance with 37 C.F.R. §§ 1.821-1.825.

Paragraph 0151 is amended to assign SEQ ID NOS: 46760-46765 to the listed sequences in compliance with 37 C.F.R. §§ 1.821-1.825.

Paragraph 0157 is amended to assign SEQ ID NO: 46757 to the sequence shown in Fig. 13A in compliance with 37 C.F.R. §§ 1.821-1.825.

Paragraph 0160 is amended to assign SEQ ID NO: 46758 to the sequence shown in Fig. 14A in compliance with 37 C.F.R. §§ 1.821-1.825.

2. Conclusion

Applicant respectfully submits that the instant application is in good and proper order for allowance and early notification to this effect is solicited. If, in the opinion of the Examiner, a telephone conference would expedite prosecution of the instant application, the Examiner is encouraged to call the undersigned at the number listed below.

Respectfully submitted,

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